

## AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) ~~A method of making an optical fiber according to claim 1, A~~  
method of making an optical fiber in which an optical fiber preform is drawn upon heating;  
said method using a drawing furnace for drawing said optical fiber preform upon heating in  
an atmosphere comprising an He gas, and using a protecting tube, disposed with a predetermined  
gap with respect to said drawing furnace, having therewithin an atmosphere comprising a  
predetermined gas with a thermal conductivity lower than that of said He gas;  
wherein said gap between said drawing furnace and said protecting tube is a gas mixture  
layer in which said He gas and said predetermined gas exist in a mixed state;  
wherein said drawn optical fiber enters said gas mixture layer at an entrance temperature  
within the range of 1400 to 1800°C, while said optical fiber drawn by said drawing furnace is fed  
into said protecting tube by way of said gas mixture layer;  
wherein a barrier for separating said gas mixture layer from an outside air is provided;  
wherein said barrier is formed with a gas outlet for letting out at least said He gas; and  
wherein at least said He gas is let out from said gas outlet to said outside air.

3. (Original) A method of making an optical fiber according to claim 2, wherein said  
barrier is formed with a gas inlet; and  
wherein said predetermined gas is introduced inside said barrier from said gas inlet.